

CLAIM AMENDMENTS

1 1. (Currently Amended) A method of determining participants of a distributed ~~operation~~
2 transaction in a distributed system, the method comprising the steps of:
3 registering, in a name service, participant data that identifies a plurality of participants
4 that are participating in said distributed ~~operation~~ transaction, wherein said step of
5 registering occurs in response to said plurality of participants commencing
6 participation in said distributed transaction; and
7 ~~wherein said distributed operation is a unit of work involving said plurality of~~
8 ~~participants;~~
9 ~~wherein said name service registers information received from clients and provides said~~
10 ~~information to clients that request the information, wherein said clients include~~
11 ~~one or more nodes different than a node on which said name service resides; and~~
12 causing a particular node of said ~~one or more nodes~~ that requires information about
13 participants in said distributed ~~operation~~ transaction to request said participant
14 data from said name service.

1 2. (Currently Amended) The method of Claim 1, wherein the step of causing a particular
2 node includes causing said ~~particular~~ node to retrieve said participant data in response to
3 said ~~particular~~ node performing deadlock detection.

1 3. (Currently Amended) The method of Claim 1, wherein:
2 ~~said distributed operation is a distributed transaction; and~~
3 the step of registering includes registering in ~~[[a]]~~ said name service participant data that
4 identifies which database servers of a plurality of database servers are
5 participating in said distributed transaction.

1 4. (Currently Amended) The method of Claim 1, further including the step of causing
2 updates to said participant data to identify a new participant in said distributed ~~operation~~
3 transaction.

1 5. (Currently Amended) The method of Claim 4, wherein:
2 said distributed ~~operation~~ transaction is a distributed database transaction being executed
3 by a set of processes coordinated by a coordinator process;
4 the method further includes the step of said coordinator process causing a new process on
5 a database server to participate in said distributed database transaction; and
6 the step of causing updates to said participant data includes said coordinator process
7 causing updates to said participant data in response to said new process
8 participating in said distributed database transaction.

1 6. (Currently Amended) The method of Claim 1, wherein:
2 said distributed ~~operation~~ transaction is a distributed database transaction;
3 the step of registering includes registering participant data that identifies which database
4 servers of a plurality of database servers are participating in said distributed
5 database transaction; and
6 the step of causing a ~~particular~~ node includes causing a ~~particular~~ node that requires
7 information about participants in said distributed database transaction to retrieve
8 said participant data from said name service.

1 7. (Currently Amended) The method of Claim 1, wherein:
2 said distributed ~~operation~~ transaction is a distributed database transaction;
3 the method further includes the step of assigning a transaction identifier to said
4 distributed database transaction;
5 the step of registering includes registering, in said name service, data that associates said
6 participant data with said transaction identifier; and
7 the step of causing a ~~particular~~ node includes causing a ~~particular~~ node to request, from
8 said name service, published data associated with said transaction identifier.

1 8. (Currently Amended) The method of Claim 1, wherein the steps further include said
2 name service receiving a request from a first process to supply said participant data,
3 wherein said name service and said first process reside on said ~~particular~~ node.

1 9. (Currently Amended) The method of Claim 8, wherein the step of causing a particular
2 node includes said name service retrieving said participant data from one or more data
3 structures residing on said particular node in response to receiving said request.

1 10. (Cancelled)

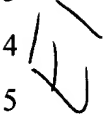
1 11. (Currently Amended) A computer-readable medium carrying one or more sequences of
2 one or more instructions for determining participants of a distributed operation
3 transaction in a distributed system, the one or more sequences of one or more instructions
4 including instructions which, when executed by one or more processors, cause the one or
5 more processors to perform the steps of:
6 registering in a name service participant data that identifies a plurality of participants that
7 are participating in said distributed ~~operation~~ transaction, wherein said step of
8 registering occurs in response to said plurality of participants commencing
9 participation in said distributed transaction; and
10 ~~wherein said distributed operation is a unit of work involving said plurality of~~
11 ~~participants;~~
12 ~~wherein said name service registers information received from clients and provides said~~
13 ~~information to clients that request the information, wherein said clients include~~
14 ~~one or more nodes different than a node on which said name service resides; and~~
15 causing a particular node of said one or more nodes that requires information about
16 participants in said distributed ~~operation~~ transaction to request said participant
17 data from said name service.

1 12. (Currently Amended) The computer-readable medium of Claim 11, wherein the step of
2 causing a particular node includes causing said particular node to retrieve said participant
3 data in response to said particular node performing deadlock detection.

1 13. (Currently Amended) The computer-readable medium of Claim 11, wherein:
2 ~~said distributed operation is a distributed transaction; and~~

3 the step of registering includes registering in [[a]] said name service participant data that
4 identifies which database servers of a plurality of database servers are
5 participating in said distributed transaction.

1 14. (Currently Amended) The computer-readable medium of Claim 11, further including the
2 step of causing updates to said participant data to identify a new participant in said
3 distributed ~~operation~~ transaction.

1 15. (Currently Amended) The computer-readable medium of Claim 14, wherein:
2 said distributed ~~operation~~ transaction is a distributed database transaction being executed
3 by a set of processes coordinated by a coordinator process;
4  the computer-readable medium further includes sequences of instructions for performing
5 the step of said coordinator process causing a new process on a database server to
6 participate in said distributed database transaction; and
7 the step of causing updates to said participant data includes said coordinator process
8 causing updates to said participant data in response to said new process
9 participating in said distributed database transaction.

1 16. (Currently Amended) The computer-readable medium of Claim 11, wherein:
2 said distributed ~~operation~~ transaction is a distributed database transaction;
3 the step of registering includes registering participant data that identifies which database
4 servers of a plurality of database servers are participating in said distributed
5 database transaction; and
6 the step of causing a ~~particular~~ node includes causing a ~~particular~~ node that requires
7 information about participants in said distributed database transaction to retrieve
8 said participant data from said name service.

1 17. (Currently Amended) The computer-readable medium of Claim 11, wherein:
2 said distributed ~~operation~~ transaction is a distributed database transaction;
3 the steps further include the step of assigning a transaction identifier to said distributed
4 database transaction;

5 the step of registering includes registering in said name service data that associates said
6 participant data with said transaction identifier; and
7 the step of causing a ~~particular~~ node includes causing a ~~particular~~ node to request, from
8 said name service, published data associated with said transaction identifier.

1 18. (Currently Amended) The computer-readable medium of Claim 11, wherein the steps
2 further include said name service receiving a request from a first process to supply said
3 participant data, wherein said name service and said first process reside on said ~~particular~~
4 node.

1 19. (Currently Amended) The computer-readable medium of Claim 18, wherein the step of
2 causing a ~~particular~~ node includes said name service retrieving said participant data from
3 one or more data structures residing on said ~~particular~~ node in response to receiving said
4 request.

1 20. (Cancelled)

1 21. (Cancelled)

1 22. (New) A method for determining a plurality of participants that are participating in a
2 distributed transaction, the method comprising the computer-implemented steps of:
3 in response to said plurality of participants commencing participation in said distributed
4 transaction, receiving first data that identifies said plurality of participants;
5 in response to receiving said first data, registering said first data;
6 receiving a request from a node;
7 in response to said request from said node, providing second data to said node, wherein
8 said second data includes at least part of said first data.

1 23. (New) The method of Claim 22, wherein a name service performs the steps of receiving
2 said first data, registering said first data, receiving said request, and providing said second
3 data.

1 24. (New) The method of Claim 22, wherein said node uses said information to determine
2 whether a deadlock exists, and wherein said request is received after a particular
3 participant of said plurality of participants has waited for a threshold period of time.

1 25. (New) The method of Claim 22, wherein:
2 said distributed transaction is a distributed database transaction; and
3 said first data identifies one or more database servers of a plurality of database servers
4 that are participating in said distributed database transaction.

1 26. (New) The method of Claim 22, wherein:
2 said plurality of participants includes all participants in the distributed transaction; and
3 said first data identifies said all participants in the distributed transaction.

1 27. (New) A computer-readable medium carrying one or more sequences of one or more
2 instructions for determining a plurality of participants that are participating in a
3 distributed transaction, the one or more sequences of one or more instructions including
4 instructions which, when executed by one or more processors, cause the one or more
5 processors to perform the steps of:
6 prior to said plurality of participants commencing participation in said distributed
7 transaction, receiving first data that identifies said plurality of participants;
8 in response to receiving said first data, registering said first data;
9 receiving a request from a node;
10 in response to said request from said node, providing second data to said node, wherein
11 said second data includes at least part of said first data.

1 28. (New) The computer-readable medium of Claim 27, wherein a name service performs
2 the steps of receiving said first data, registering said first data, receiving said request, and
3 providing said second data.

1 29. (New) The computer-readable medium of Claim 27, wherein said
2 information to determine whether a deadlock exists, and wherein said request is received
3 after a particular participant of said plurality of participants has waited for a threshold
4 period of time.

1 30. (New) The computer-readable medium of Claim 27, wherein:
2 said distributed transaction is a distributed database transaction; and
3 said first data identifies one or more database servers of a plurality of database servers
4 that are participating in said distributed database transaction.

1 31. (New) The computer-readable medium of Claim 27, wherein:
2 said plurality of participants includes all participants in the distributed transaction; and
3 said first data identifies said all participants in the distributed transaction.
